# Historical Significance of Cannabis

Dr. William Troutt N.M.D

Dr.Troutt@Trulieve.com



# Cannabis Sativa L.



#### Carl Von Linneaus

- Formalized system of naming organisms, "Binomial Nomenclature"
- Described Cannabis Sativa in "Species Planetarium",
   1753
- Sativa means cultivated.

#### Jean-Baptiste Lamarck

- Proposed two species of Cannabis, 1785
  - Cannabis Sativa, cultivated in western regions
  - Cannabis Indica, a wild species growing in India and eastern countries

Known in different languages by the following names: Cannabis, Latin; chanvre, French; cáñamo, Spanish; canhamo, Portuguese; canapa, Italian; canep, Albanian; conopli, Russian; conopj and penek, Polish; kemp, Belgian; hanf, German; hennup, Dutch; hamp, Swedish; hampa, Danish; kenevir, Bulgarian; ta-ma, si-maj and tse-ma, Chinese; asa, Japanese; nasha, Turkish; kanabira, Syrian; kannab, Arabic. (1913 Yearbook USDA)

# Bactria Margiana

2300-1700 BCE



1.Sarianidi, V. I. "Issledovanija pamjatnikov Dashlyiskogo Oazisa," in Drevnii Baktria, vol. 1. Moscow: Akademia Nauk. 1976

# EARLY CANNABIS DISPENSARY





1.Sarianidi, V. I. "Issledovanija pamjatnikov Dashlyiskogo Oazisa," in Drevnii Baktria, vol. 1. Moscow: Akademia Nauk. 1976

# Cannabis Natural Resource

#### Textiles and Fabrics

- A greatest portion of all the textiles and fabrics around the world for clothes, tents, rugs, quilts, etc. were produced from Cannabis Hemp prior to 1800.
- Sails on ships that brought us to America and the coverings on Wagons that took us west.
- The First American Flag, "Old Glory".
- First "Levi Strauss" Jeans

#### Fiber and Pulp Paper

- The greatest portion of all paper around the world was made with Cannabis Hemp fiber up through the 1800's for printing books, bibles, maps, paper money, newspapers, etc.
- First Drafts of the Declaration of Independence.
- Rembrandt and Vincent Van Gogh used Cannabis Hemp Canvases
  - The word canvas is derived from the word cannabis.

#### Rope, Twine, and Cordage

- A large portion of all the Rope, Twine and, Cordage around the world was produced from Cannabis Hemp until 1937.
- Over 50 tons of Cannabis Hemp used to make the rope and rigging for the USS Constitution, 1798

#### Lighting Oil

— Until 1800 Cannabis Hemp seed oil was the most common lighting oil for lamps in America and around the world, eventually exceeded by Whale oil and ultimately replaced by petroleum.

#### Foods, Oils, and Protein

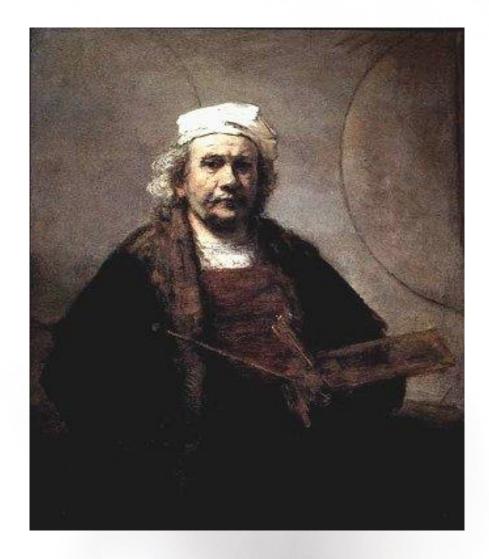
- Hemp Seed contains all the essential Amino Acid proteins and essential Omega Fatty Acids to sustain life.
- Cannabis Hemp Seed was commonly used in porridges, soups, and gruels throughout the world.
- Cannabis Hemp was a predominant seed for wild and domestic birds, sold retail in the United States Thru 1937.

#### Biomass Fuel

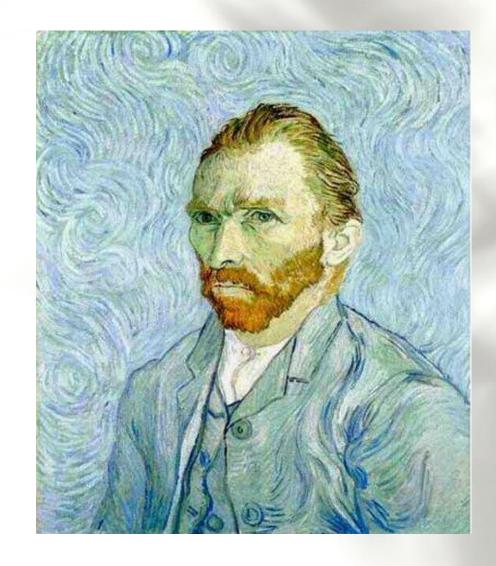
- Cannabis is one of the largest biomass producers consisting of over 70 percent cellulose.
- Henry Fords first car was powered by cannabis fuel.

#### Medicine

- For thousands of years Cannabis has been one of the most widely used plant medicines around the world.
- In 1964 Dr. Raphael Mechoulam isolated Tetrahydrocannabinol (THC) at the University of Tel Aviv.
  - Since then, over 100 unique cannabinoids have been isolated from the cannabis plant.



Rembrandt Harmenszoon van Rijn (July 15, 1606 – October 4, 1669)



Vincent Willem Van Gogh (30 March 1853 – 29 July 1890)

# **USS** Constitution

# Navy Yard, Boston 6/19/31 USF Constitution Spar deck looking for

USS Constitution Museum Courtesy Naval History & Heritage Command Detachment Boston

# U.S. Navy ropewalk



USS Constitution Museum courtesy of Boston Globe.

#### YEARBOOK

OF THE

UNITED STATES DEPARTMENT OF AGRICULTURE

1913



WASHINGTON GOVERNMENT PRINTING OFFICE 1914

## "The oldest cultivated fiber plant"

Average annual imports and estimates of average annual production of hemp fiber in 5-year periods from 1876 to 1910, inclusive, and from 1911 to 1913, inclusive.

	Years.	Imports.	Production in United States.	Total.
		Tons.	Tons.	Tons.
	1876 to 1839	<b>4</b> 59	7,396	7,855
١	1881 to 1885	5, 393	5, 421	10,814
	1886 to 1890	10, 427	8, 270	18,697
١	1891 to 1895	4,962	5, 631	10,593
١	1896 to 1939	4,985	5, 177	10, 162
١	<b>1901 to 1</b> 935	4,577	6,175	10,752
١	1906 to 1910	6,375	5, 150	11,525
	1911 to 1913	5, 982	5,100	11, 082

HEMP. By LYSTER H. DEWEY, Botanist in Charge of Fiber-Plant Investigations, Bureau of Plant Industry,

# Popular Mechanics 1938

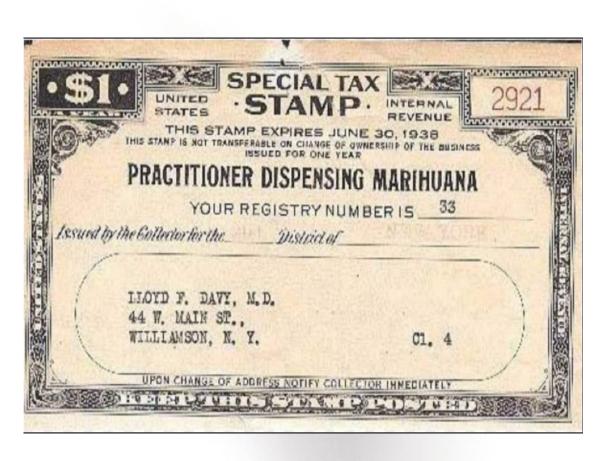


"Hemp is the Standard fiber of the world"

Newly invented machine to remove fiber from hemp that contains seventy-seven percent cellulose.

"can be used to produce more than 25,000 different products, ranging from dynamite to cellophane.

# 1937 Marihuana Tax Act



- Created a tax on cannabis that was prohibitive on the Industry and personal use.
- Nylon was patented the same year.
- Provided a market advantage to petroleum resources and proprietary synthetic processes.
- Forever Chemicals polyfluorinated alkyl substances (PFAS)

# Marijuana Tax/Stamp Act

Dr. William Woodward, M.D., LL.M, LL. D, spoke in front of the U.S. House of Representatives on May 4, 1937.

I use the word 'Cannabis' in preference to the word 'marihuana', because Cannabis is the correct term for describing the plant and its products.... In other words, marihuana is not...

the burden of this bill is placed heavily on the doctors and pharmacists of the country; and I may say very heavily, most heavily, possibly of all, on the farmers of the country.

The Federal Government... would meet with the same difficulty that it met in prosecuting under the National Prohibition Act; the inadequacy of courts and the inadequacy of prosecuting attorneys, and I may say, the inadequacy of jails.

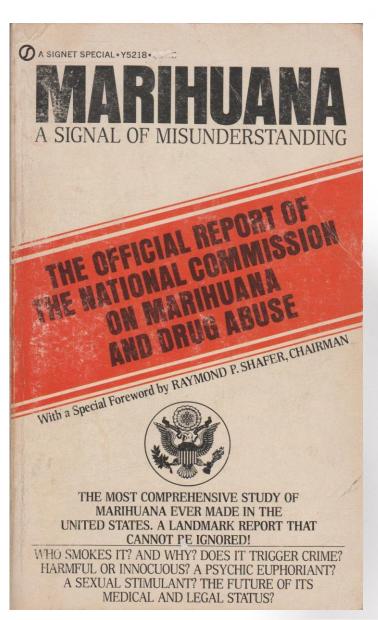


https://dfcr.org/the-prescience-of-william-c-woodward/

# 1970 Controlled Substance Act

- Statute that created US Federal Drug Policies and Regulated Substances into five schedules.
- National Implementation of the 1961 Single Treaty.
- Cannabis was classified as a Schedule 1 Substance.
  - High potential for abuse and no medical value.
- FDA approved synthetic THC in 1985 as a Schedule 3 drug.
  - Indicated for the treatment of chemotherapy induced Nausea and Vomiting.

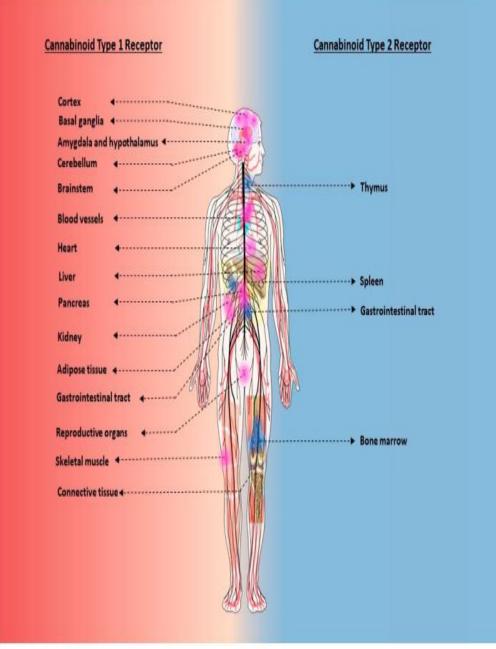
# **Shafer Commission**



The Shafer Commission, formally known as the *National Commission on 'Marihuana' and Drug Abuse*, was appointed by U.S. President Richard Nixon in early 1970. Its chairman was former Pennsylvania Governor Raymond P. Shafer.

While the Controlled Substances Act was being drafted in a House committee in 1970, It was recommended that cannabis temporarily be placed in Schedule I, the most restrictive category of drugs, pending the Commission's report.

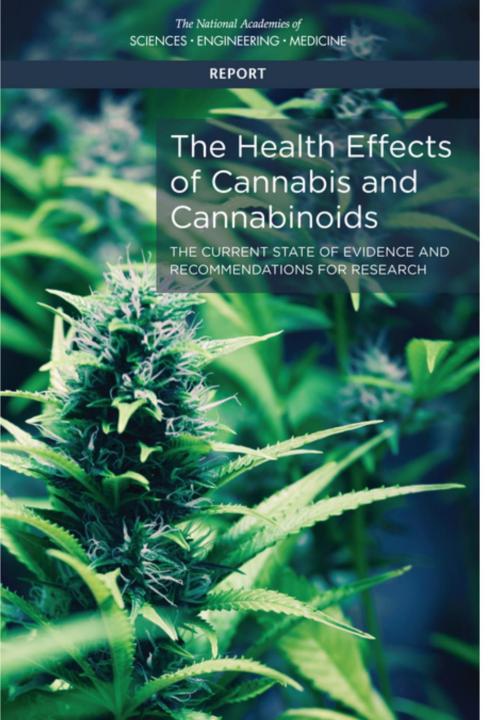
On March 22, 1972, the Commission's chairman, Raymond P. Shafer, presented a report to Congress and the public entitled "Marihuana, A Signal of Misunderstanding," which favored ending cannabis prohibition and adopting other methods to discourage use.



# The Endocannabinoid System

The ECS is a lipid communication system that regulates several biological processes such as cognitive function, sleep, pain, immune responses, reproduction, development, and eating.

- Cannabinoid 1 Receptors (CB1) Neuromodulation
  - Regulation of Central and Peripheral Nervous Systems
- Cannabinoid 2 Receptors (CB2) Immunomodulation
  - Regulation of humoral and cell mediated immunity
- Endocannabinoids CB receptor messengers
  - Anandamide, 2AG



### There is conclusive or substantial evidence that cannabis or cannabinoids are effective:

- For the treatment of chronic pain in adults
- As anti-emetics in the treatment of chemotherapy-induced nausea and vomiting
- For improving patient-reported multiple sclerosis spasticity symptoms

#### Moderate evidence For:

 Improving short-term sleep outcomes in individuals with sleep disturbance associated with obstructive sleep apnea syndrome, fibromyalgia, chronic pain, and multiple sclerosis

#### Limited evidence for:

- Increasing appetite and decreasing weight loss associated with HIV/ AIDS
- Improving clinician-measured multiple sclerosis spasticity symptoms
- Improving symptoms of Tourette syndrome
- Improving anxiety symptoms in individuals with social anxiety disorders
- Improving symptoms of post-traumatic stress disorder

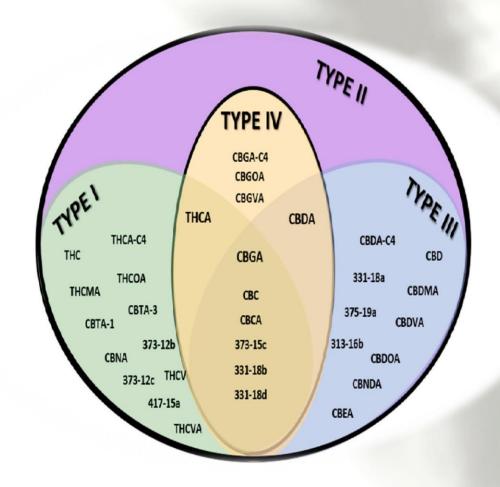
#### Limited evidence of a statistical association between cannabinoids and:

 Better outcomes (i.e., mortality, disability) after a traumatic brain injury or intracranial hemorrhage

National Academies of Sciences, Engineering, and Medicine. 2017. *The health effects of cannabis and cannabinoids: Current state of evidence and recommendations for research.* Washington DC: The National Academies Press.

# Versatile Plant Rather Than a Single Drug

- Chemotype Classification
  - —Type I
    - THC Dominant
  - —Type II
    - CBD:THC Balanced
  - —Type III
    - CBD Dominant
  - —Type IV
    - CBGA Dominant
- Hundreds of cultivars worldwide
  - —500+ secondary metabolites



Distribution of Cannabinoids to Chemovar

Procaccia S, Lewitus GM, Lipson Feder C, Shapira A, Berman P and Meiri D (2022) Cannabis for Medical Use: Versatile Plant Rather Than a Single Drug. Front. Pharmacol. 13:894960. doi: 10.3389/fphar.2022.894960



# AMERICAN HISTORY

THE

#### **PHARMACOPŒIA**

OF THE

#### UNITED STATES OF AMERICA

ELEVENTH DECENNIAL REVISION (U. S. P. XI)

BY AUTHORITY OF THE
UNITED STATES PHARMACOPŒIAL CONVENTION
HELD AT WARRINGTON, D. C., MAT 13 AND 14, 1930

PREPARED BY THE COMMITTEE OF REVISION AND PUBLISHED BY THE BOARD OF TRUSTEES

OFFICIAL FROM JUNE 1, 1936

AGEN

MACK PRINTING COMPANY EASTON, PA.



